

### ABSTRACT

A hydrocarbon containing formation may be treated using an in situ thermal process. A mixture of hydrocarbons,  $H_2$ , and/or other formation fluids may be produced from the formation. Heat may be applied to the formation to raise a temperature of a portion of the formation to a pyrolysis temperature. A formation to be treated may produce a relatively large amount of condensable hydrocarbons and/or a relatively large amount of non-condensable hydrocarbons. The formation to be treated may be chosen based on initial hydrocarbon to carbon ratio of the formation.